FIG. 1

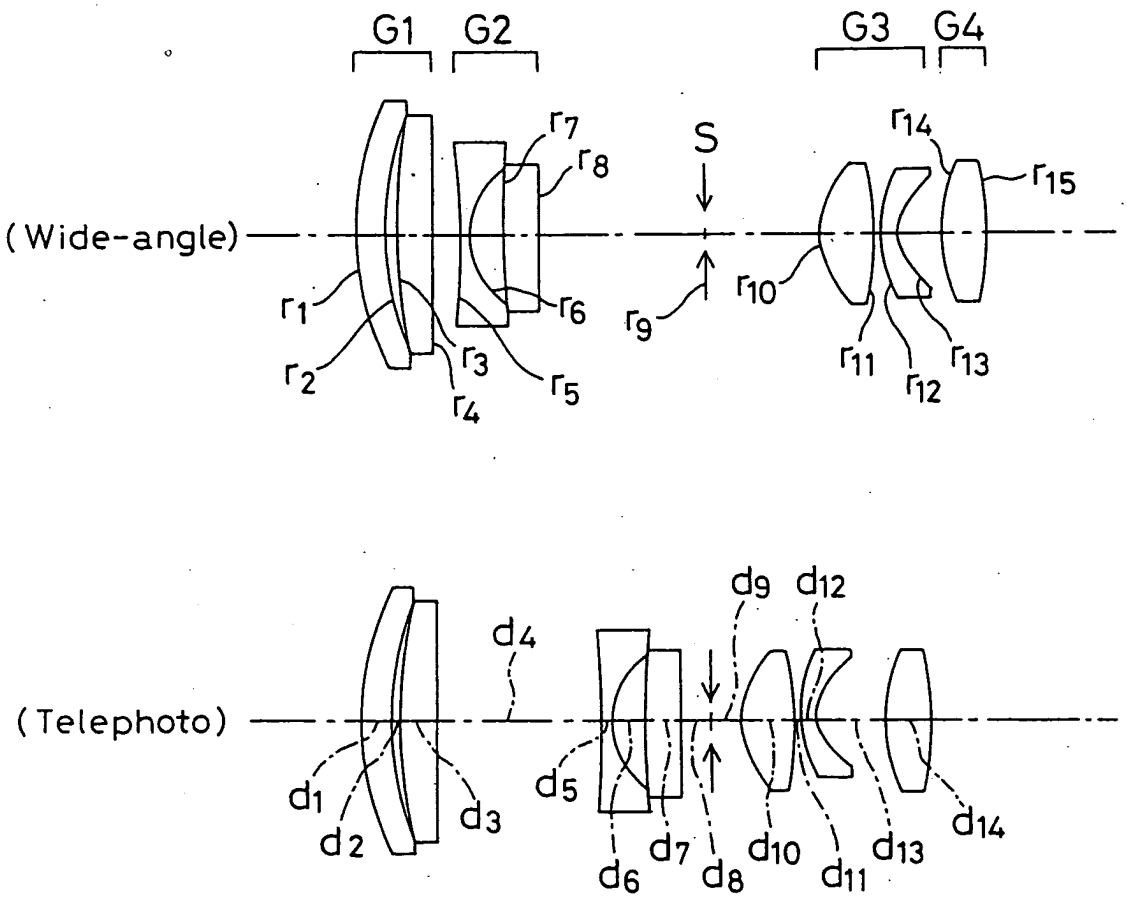

G1
G2
G3
G4
(Wide-angle)
r1
r2
r3
r4
r5
r6
r7
r8
S
r9
r10
r11
r12
r13
r14
r15
(Telephoto)
d1
d2
d3
d4
d5
d6
d7
d8
d9
d10
d11
d12
d13
d14

FIG. 2

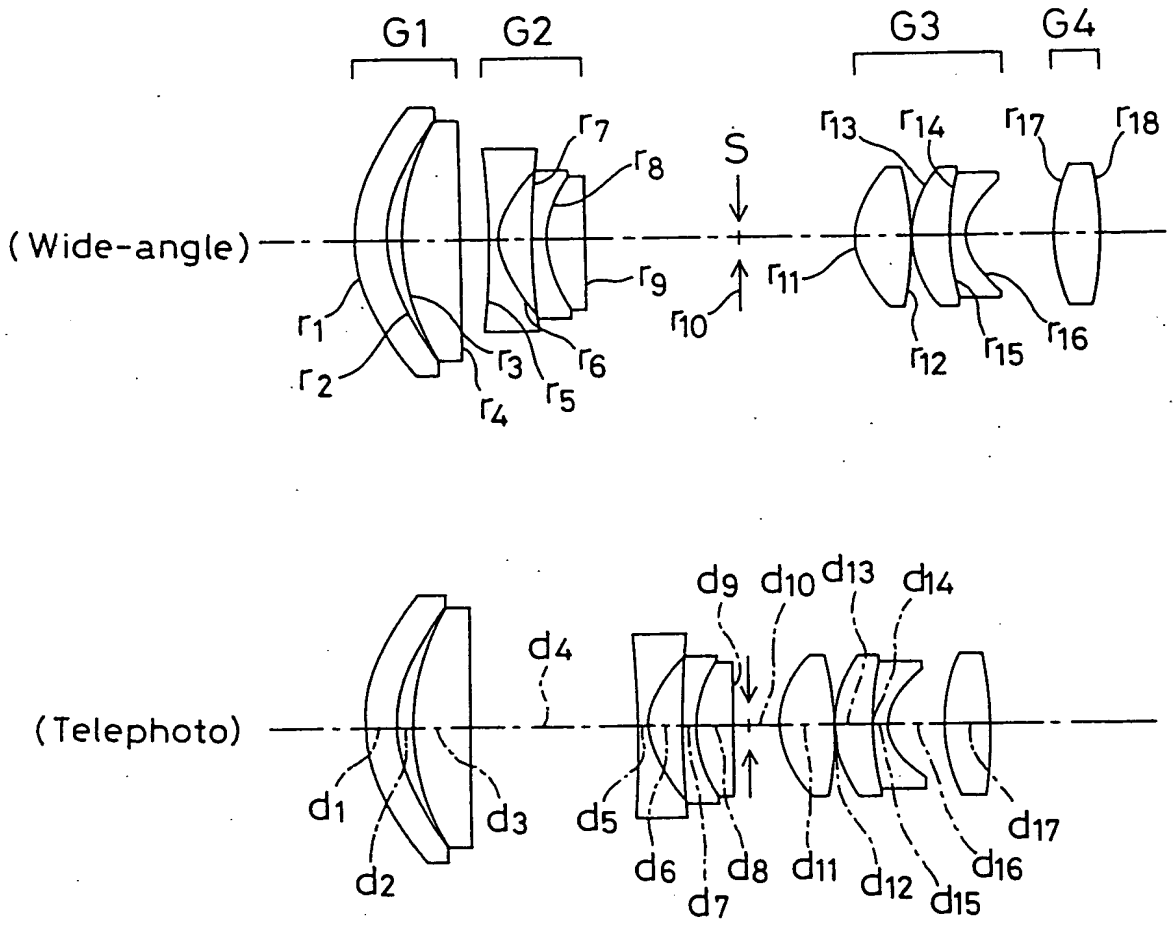

G1
G2
G3
G4
(Wide-angle)
r1
r2
r3
r4
r5
r6
r7
r8
r9
r10
r11
r12
r13
r14
r15
r16
r17
r18
S
(Telephoto)
d1
d2
d3
d4
d5
d6
d7
d8
d9
d10
d11
d12
d13
d14
d15
d16
d17

FIG. 3

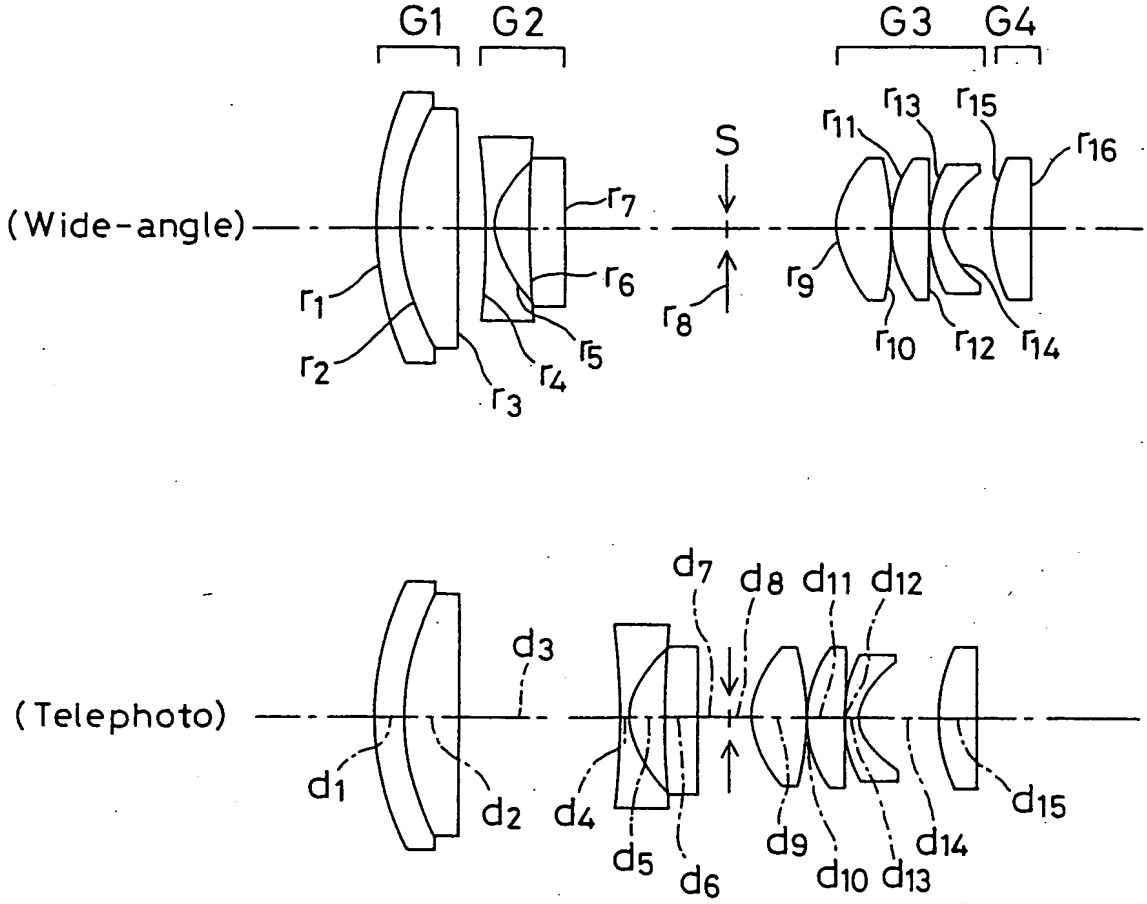

G1
G2
G3
G4
(Wide-angle)
S
r1
r2
r3
r4
r5
r6
r7
r8
r9
r10
r11
r12
r13
r14
r15
r16
(Telephoto)
d1
d2
d3
d4
d5
d6
d7
d8
d9
d10
d11
d12
d13
d14
d15

FIG. 4

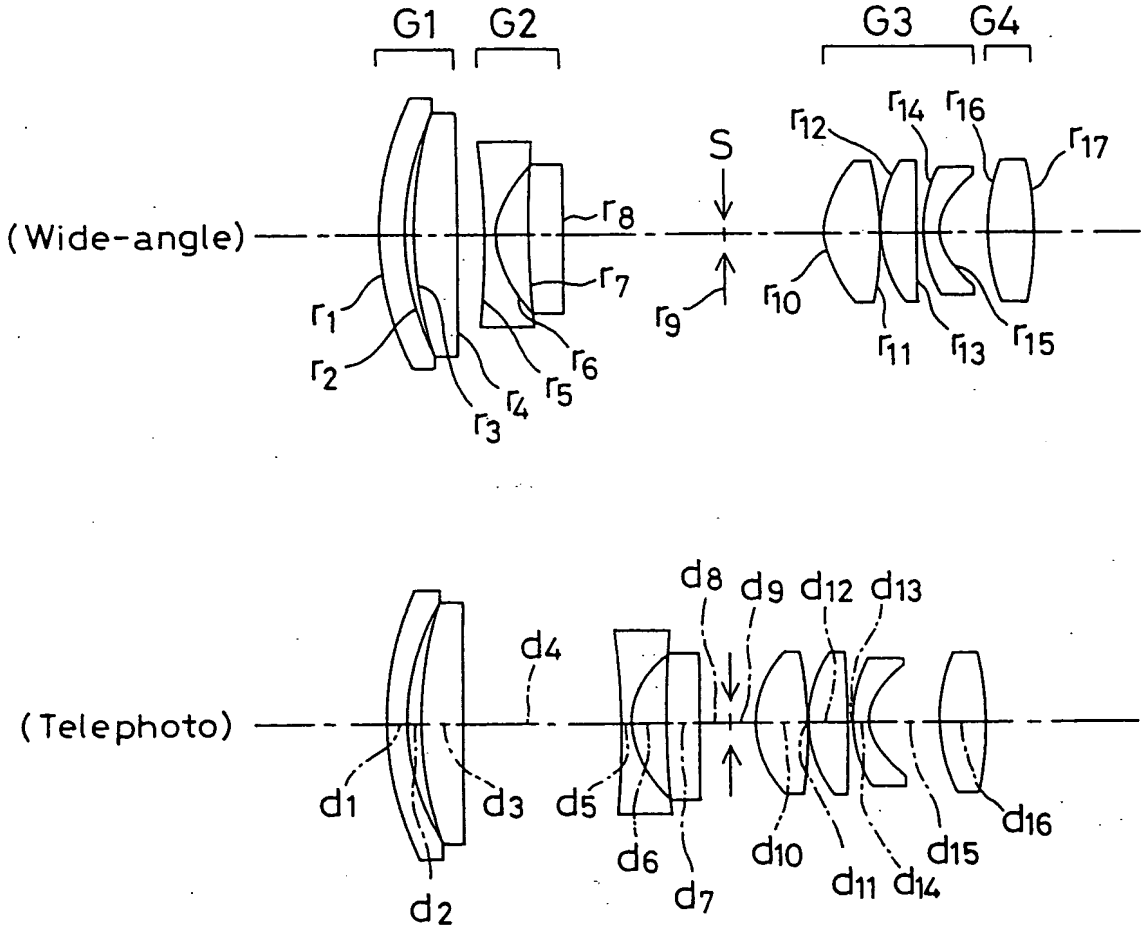

G1
G2
G3
G4
(Wide-angle)
S
r1
r2
r3
r4
r5
r6
r7
r8
r9
r10
r11
r12
r13
r14
r15
r16
r17
(Telephoto)
d1
d2
d3
d4
d5
d6
d7
d8
d9
d10
d11
d12
d13
d14
d15
d16

FIG. 5

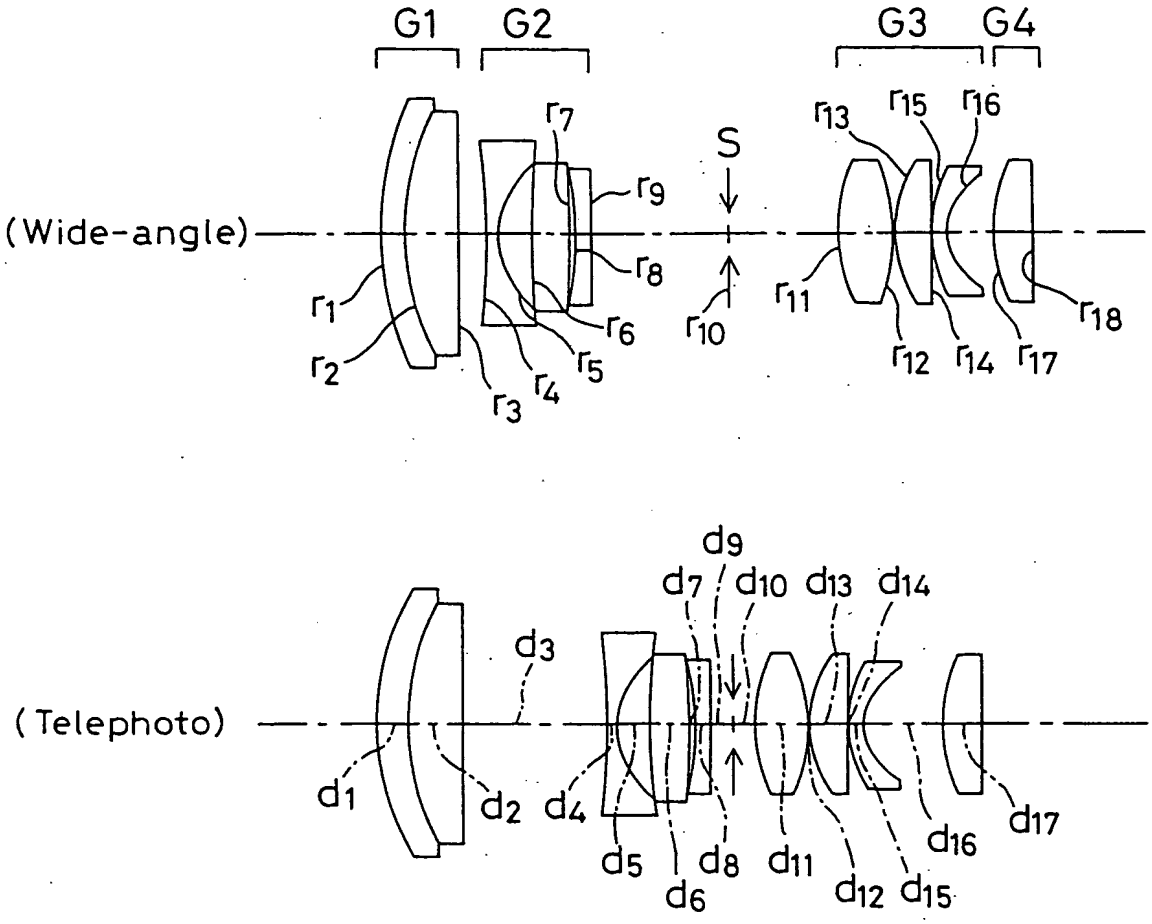

G1
G2
G3
G4
(Wide-angle)
S
r1
r2
r3
r4
r5
r6
r7
r8
r9
r10
r11
r12
r13
r14
r15
r16
r17
r18
(Telephoto)
d1
d2
d3
d4
d5
d6
d7
d8
d9
d10
d11
d12
d13
d14
d15
d16
d17

FIG. 6

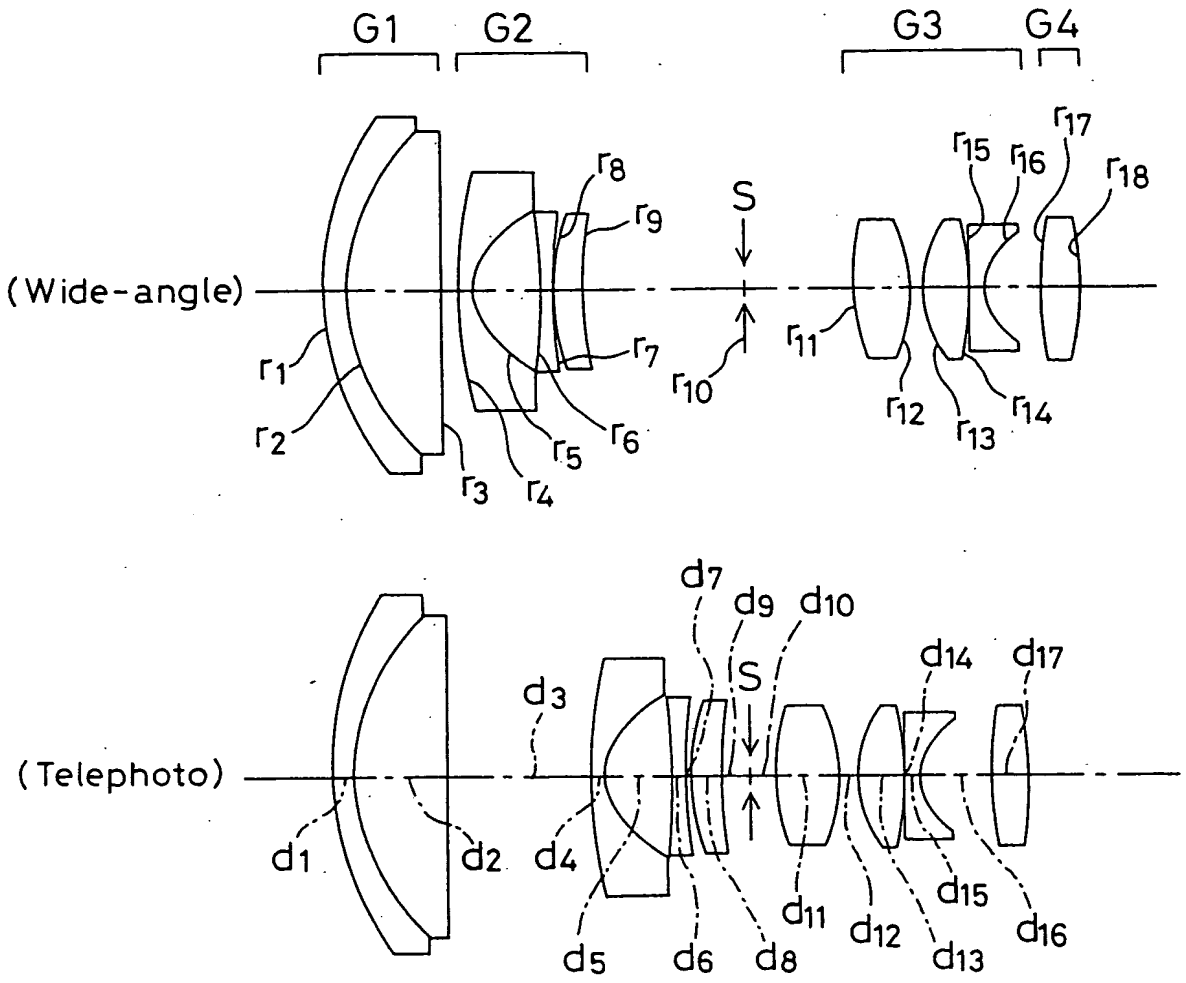

G1
G2
G3
G4
(Wide-angle)
r1
r2
r3
r4
r5
r6
r7
r8
r9
r10
r11
r12
r13
r14
r15
r16
r17
r18
S
(Telephoto)
d1
d2
d3
d4
d5
d6
d7
d8
d9
d10
d11
d12
d13
d14
d15
d16
d17
S

FIG. 7

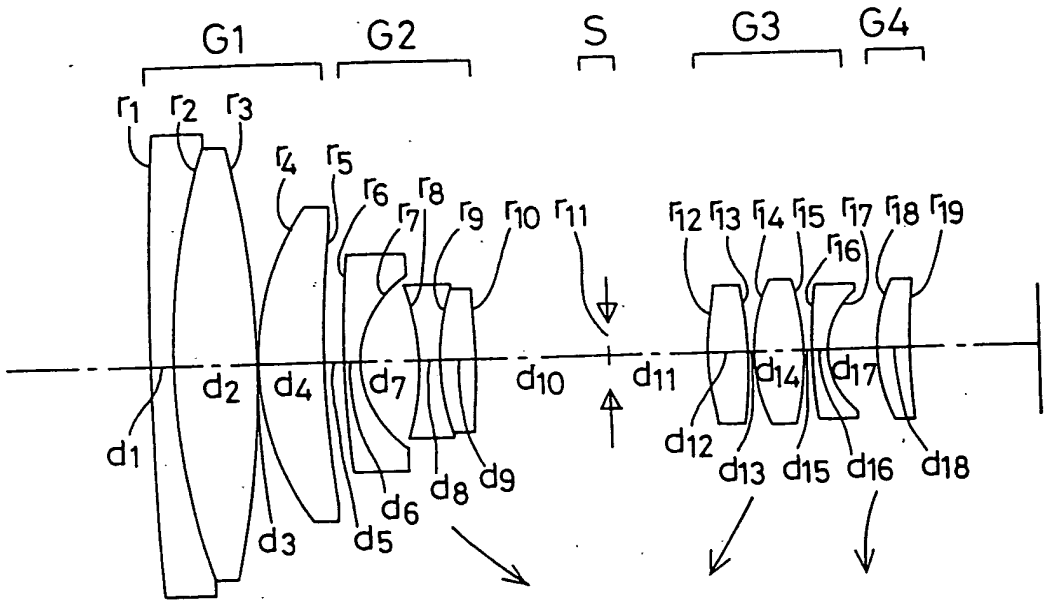

G1
G2
S
G3
G4
r1 r2 r3 r4 r5 r6 r7 r8 r9 r10 r11 r12 r13 r14 r15 r16 r17 r18 r19
d1 d2 d3 d4 d5 d6 d7 d8 d9 d10 d11 d12 d13 d14 d15 d16 d17 d18

FIG. 8

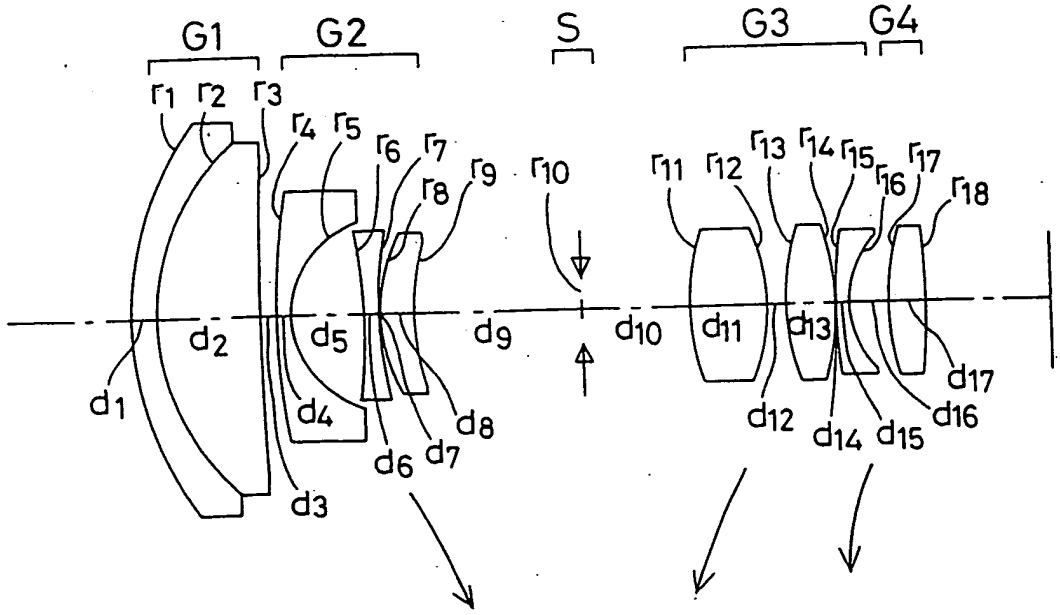

G1
G2
S
G3
G4
r1 r2 r3 r4 r5 r6 r7 r8 r9 r10 r11 r12 r13 r14 r15 r16 r17 r18
d1 d2 d3 d4 d5 d6 d7 d8 d9 d10 d11 d12 d13 d14 d15 d16 d17

FIG. 9

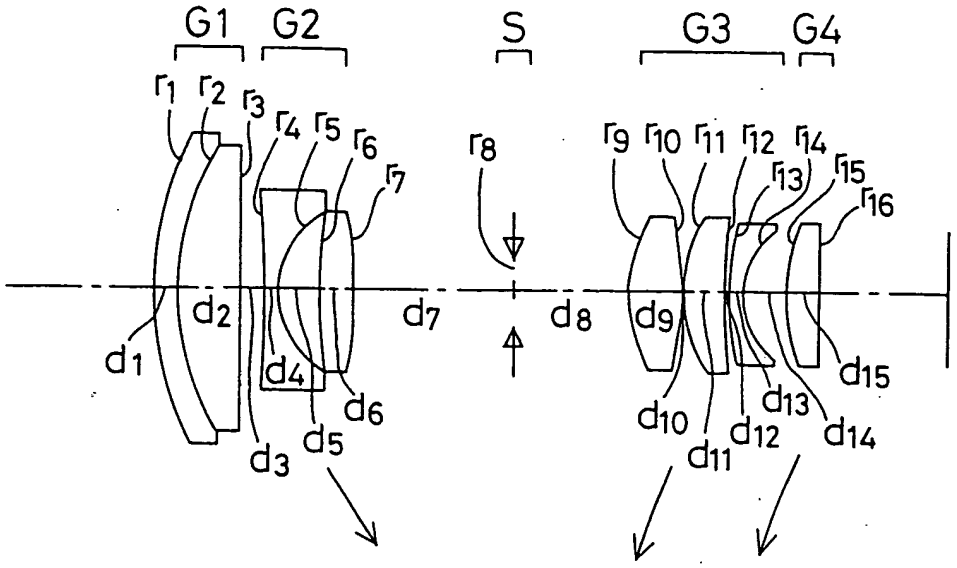

G1
G2
S
G3
G4
r1
r2
r3
r4
r5
r6
r7
r8
r9
r10
r11
r12
r13
r14
r15
r16
d1
d2
d3
d4
d5
d6
d7
d8
d9
d10
d11
d12
d13
d14
d15

FIG. 10

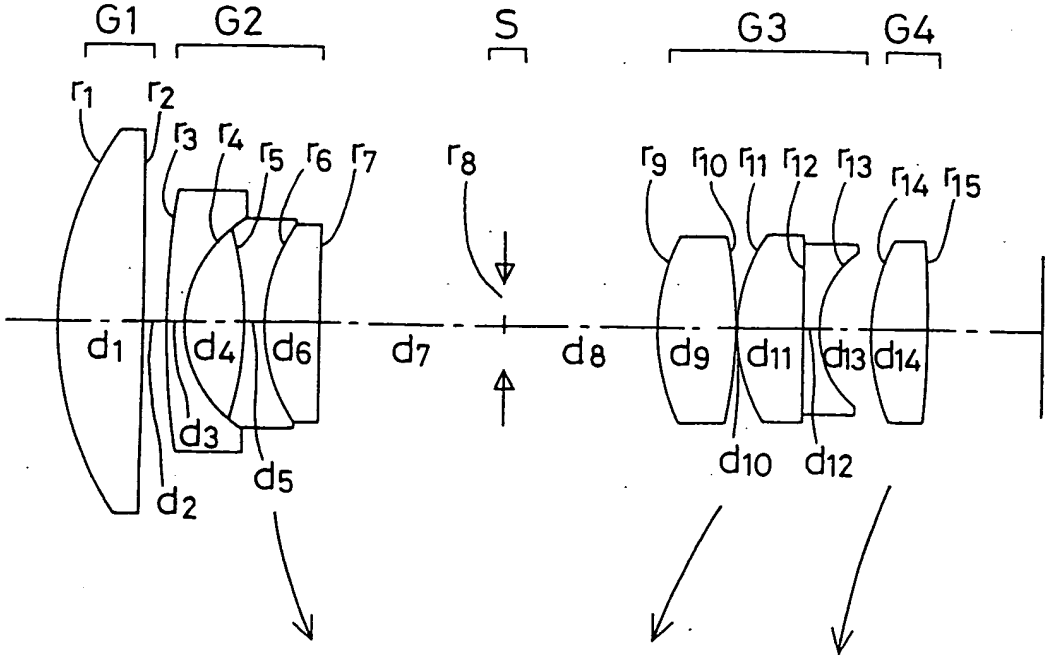

G1
G2
S
G3
G4
r1
r2
r3
r4
r5
r6
r7
r8
r9
r10
r11
r12
r13
r14
r15
d1
d2
d3
d4
d5
d6
d7
d8
d9
d10
d11
d12
d13
d14

FIG. 11

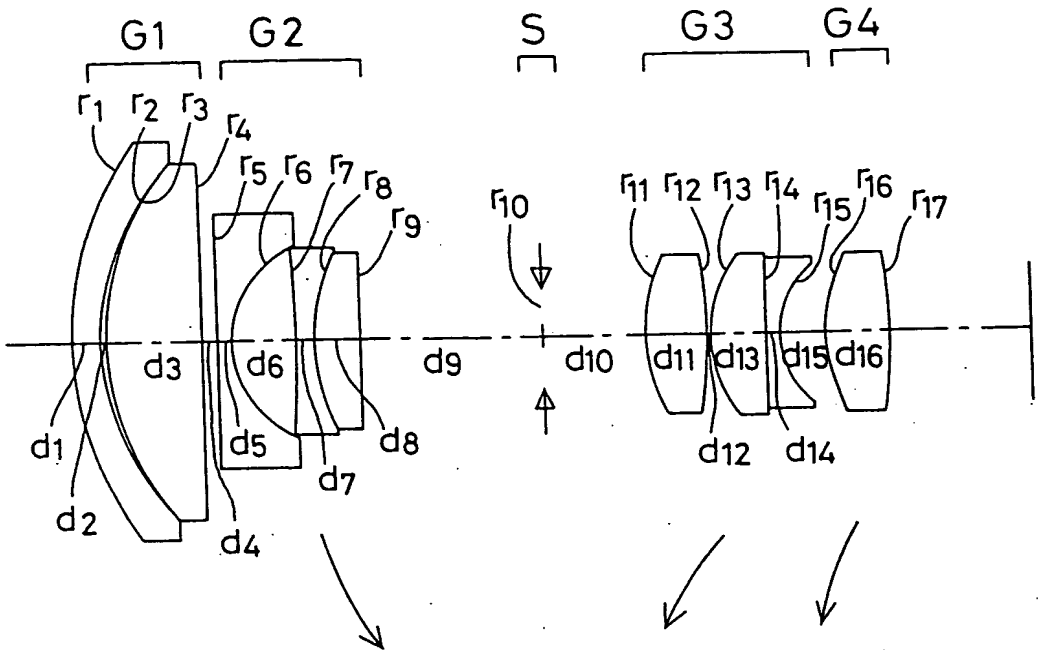

G1
G2
S
G3
G4
r1 r2 r3 r4 r5 r6 r7 r8 r9 r10 r11 r12 r13 r14 r15 r16 r17
d1 d2 d3 d4 d5 d6 d7 d8 d9 d10 d11 d12 d13 d14 d15 d16

FIG. 12

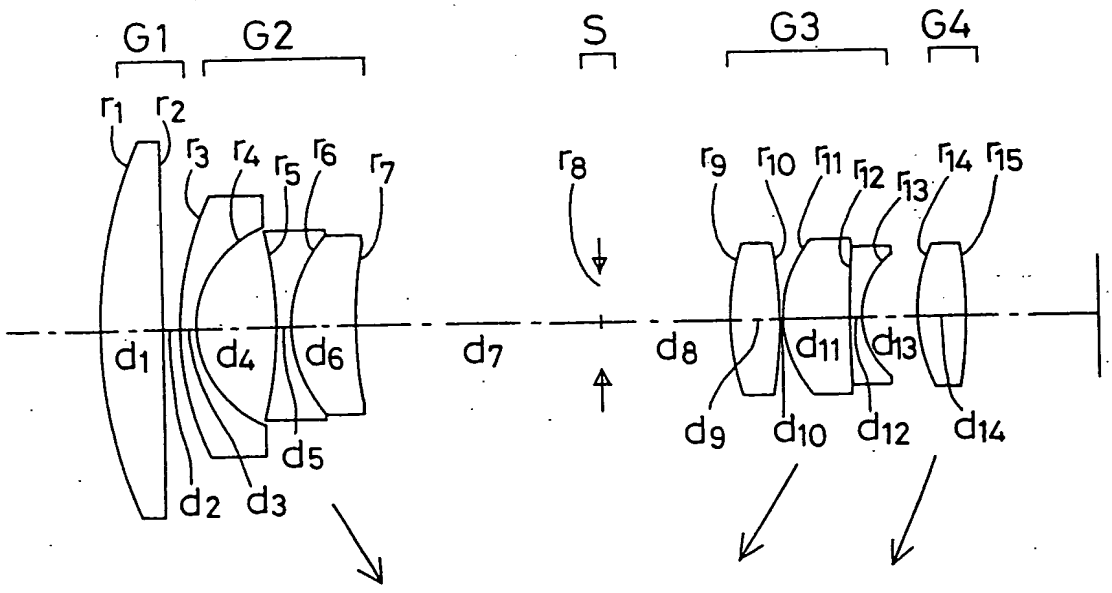

G1
G2
S
G3
G4
r1 r2 r3 r4 r5 r6 r7 r8 r9 r10 r11 r12 r13 r14 r15
d1 d2 d3 d4 d5 d6 d7 d8 d9 d10 d11 d12 d13 d14

FIG. 13

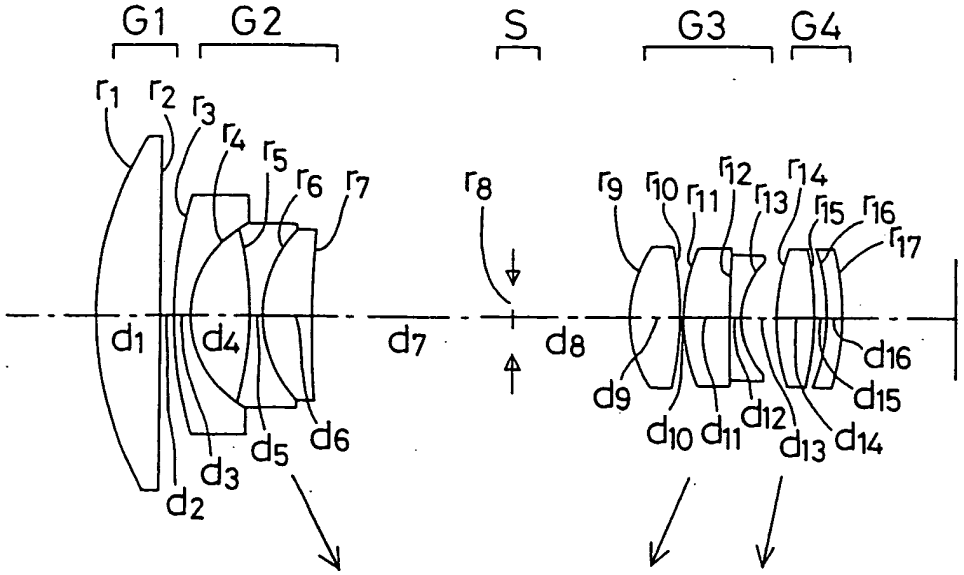

G1
G2
S
G3
G4
r1 r2 r3 r4 r5 r6 r7
r8
r9 r10 r11 r12 r13 r14 r15 r16 r17
d1 d2 d3 d4 d5 d6 d7 d8 d9 d10 d11 d12 d13 d14 d15 d16

FIG. 14

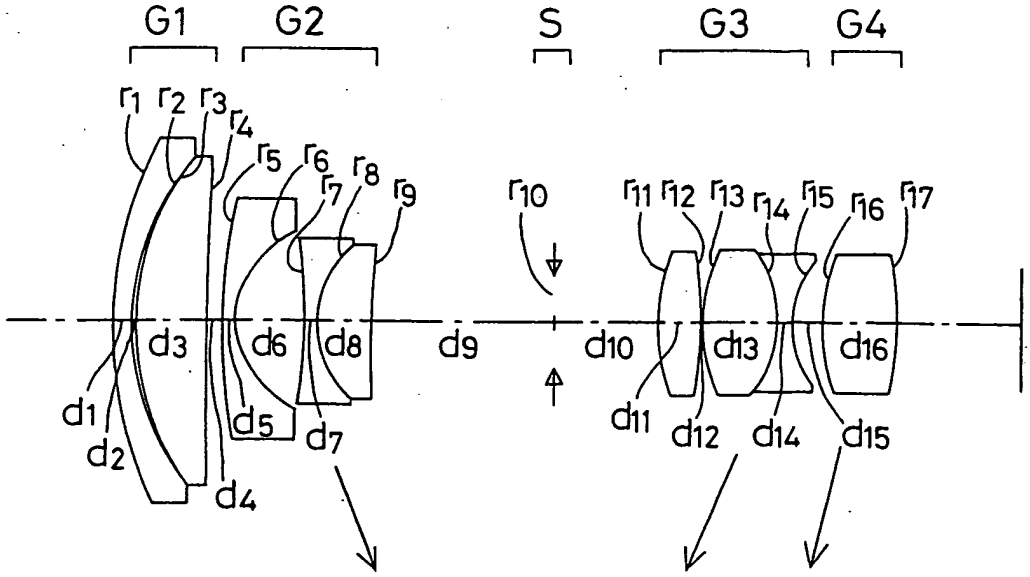

G1
G2
S
G3
G4
r1 r2 r3 r4 r5 r6 r7 r8 r9
r10
r11 r12 r13 r14 r15 r16 r17
d1 d2 d3 d4 d5 d6 d7 d8 d9 d10 d11 d12 d13 d14 d15 d16

FIG. 15

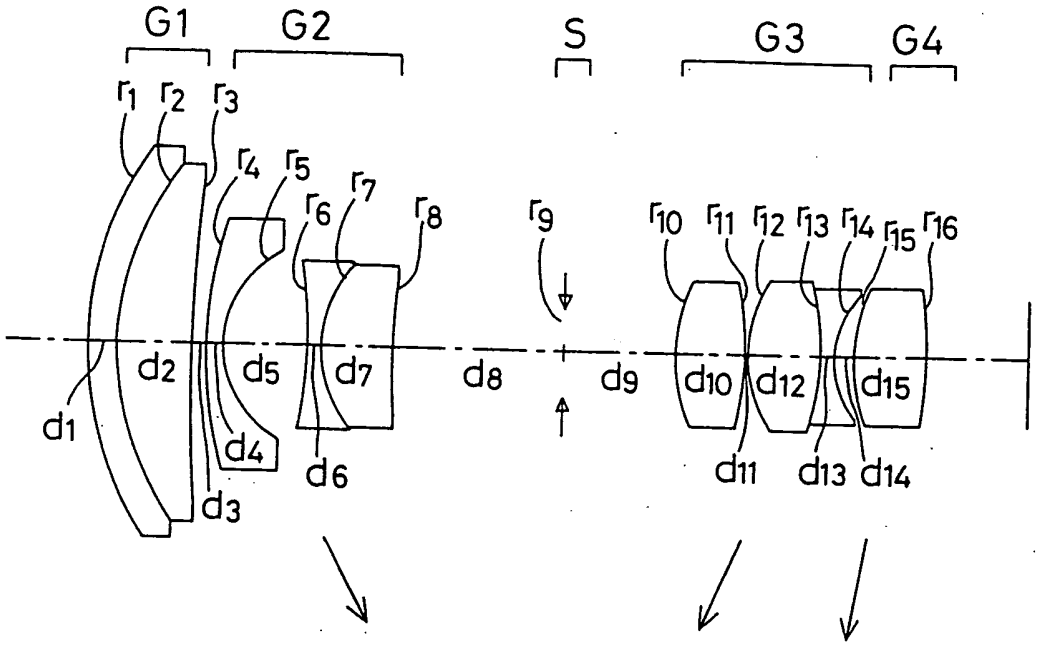

G1
G2
S
G3
G4
r1 r2 r3 r4 r5 r6 r7 r8 r9 r10 r11 r12 r13 r14 r15 r16
d1 d2 d3 d4 d5 d6 d7 d8 d9 d10 d11 d12 d13 d14 d15

FIG. 16

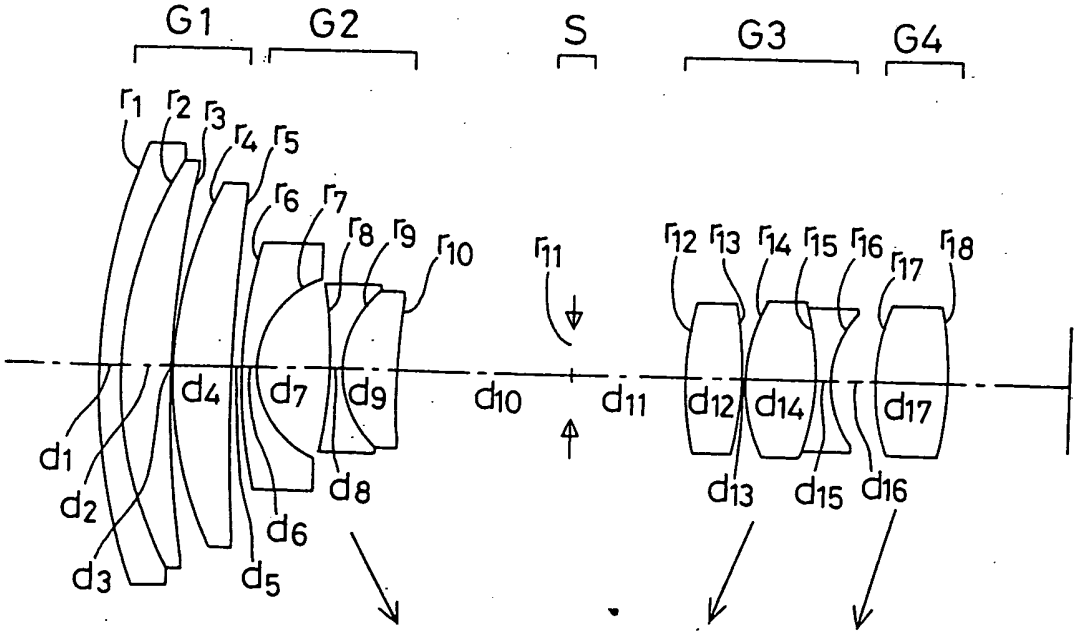

G1
G2
S
G3
G4
r1 r2 r3 r4 r5 r6 r7 r8 r9 r10 r11 r12 r13 r14 r15 r16 r17 r18
d1 d2 d3 d4 d5 d6 d7 d8 d9 d10 d11 d12 d13 d14 d15 d16 d17

FIG. 17

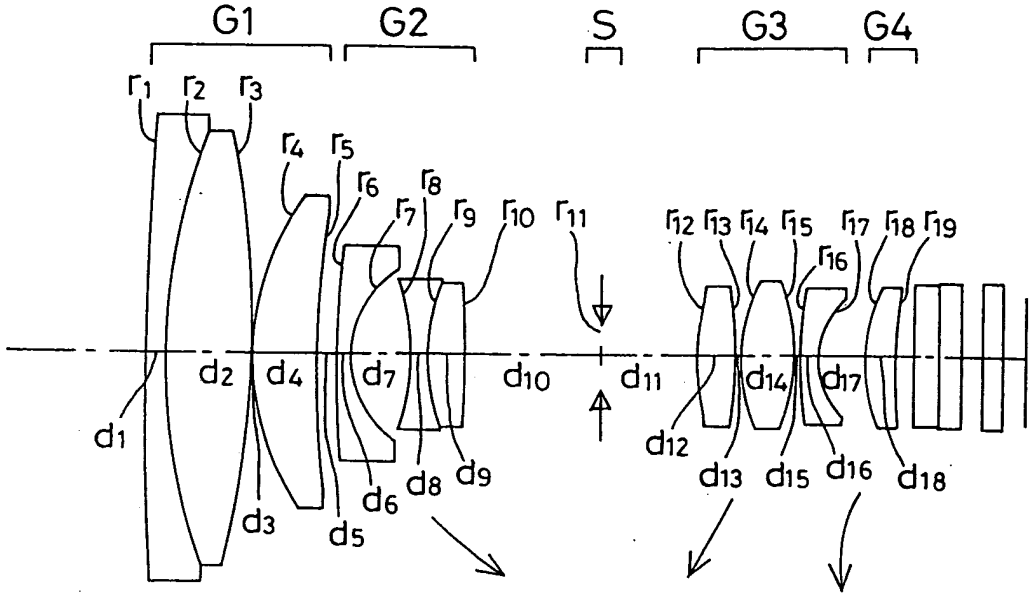

G1
G2
S
G3
G4
r1 r2 r3 r4 r5 r6 r7 r8 r9 r10 r11 r12 r13 r14 r15 r16 r17 r18 r19
d1 d2 d3 d4 d5 d6 d7 d8 d9 d10 d11 d12 d13 d14 d15 d16 d17 d18

FIG. 18

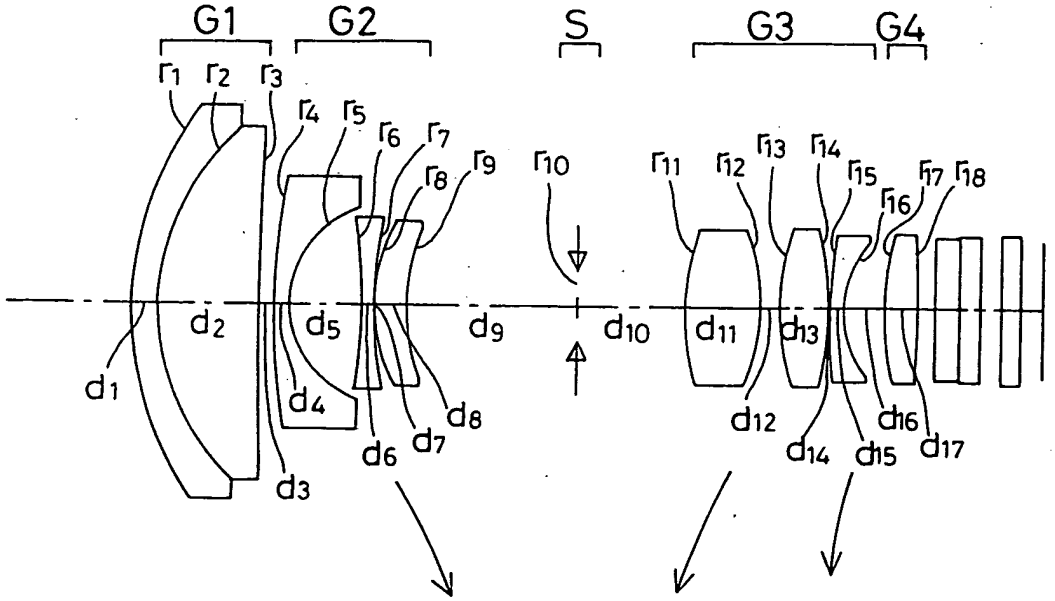

G1
G2
S
G3
G4
r1 r2 r3 r4 r5 r6 r7 r8 r9 r10 r11 r12 r13 r14 r15 r16 r17 r18
d1 d2 d3 d4 d5 d6 d7 d8 d9 d10 d11 d12 d13 d14 d15 d16 d17

FIG. 19

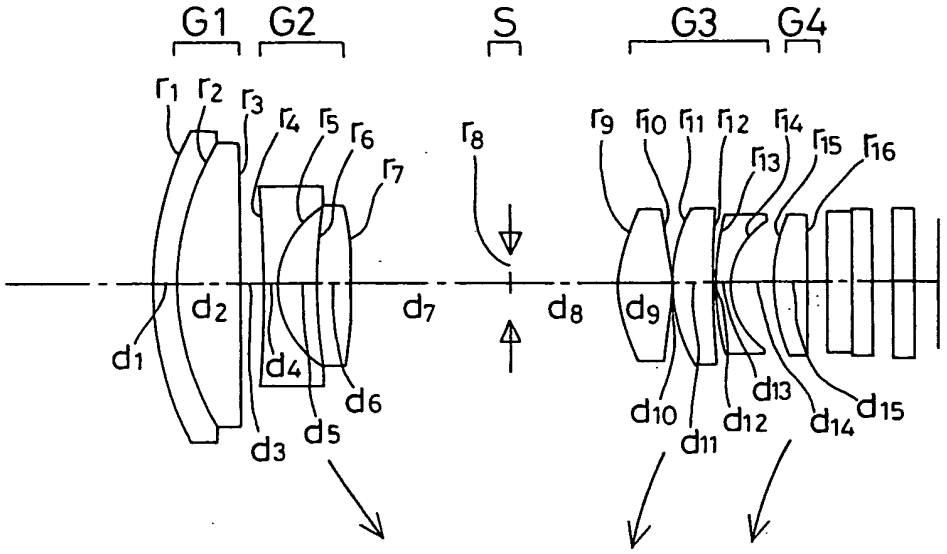

G1
G2
S
G3
G4
r1 r2 r3 r4 r5 r6 r7 r8 r9 r10 r11 r12 r13 r14 r15 r16
d1 d2 d3 d4 d5 d6 d7 d8 d9 d10 d11 d12 d13 d14 d15

FIG. 20

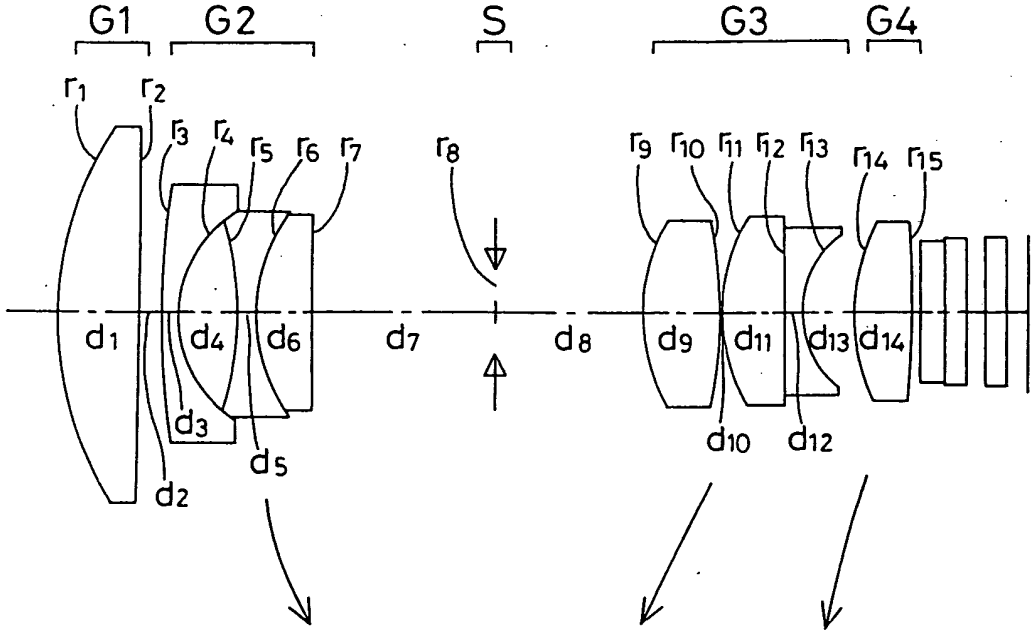

G1
G2
S
G3
G4
r1 r2 r3 r4 r5 r6 r7 r8 r9 r10 r11 r12 r13 r14 r15
d1 d2 d3 d4 d5 d6 d7 d8 d9 d10 d11 d12 d13 d14

FIG. 21

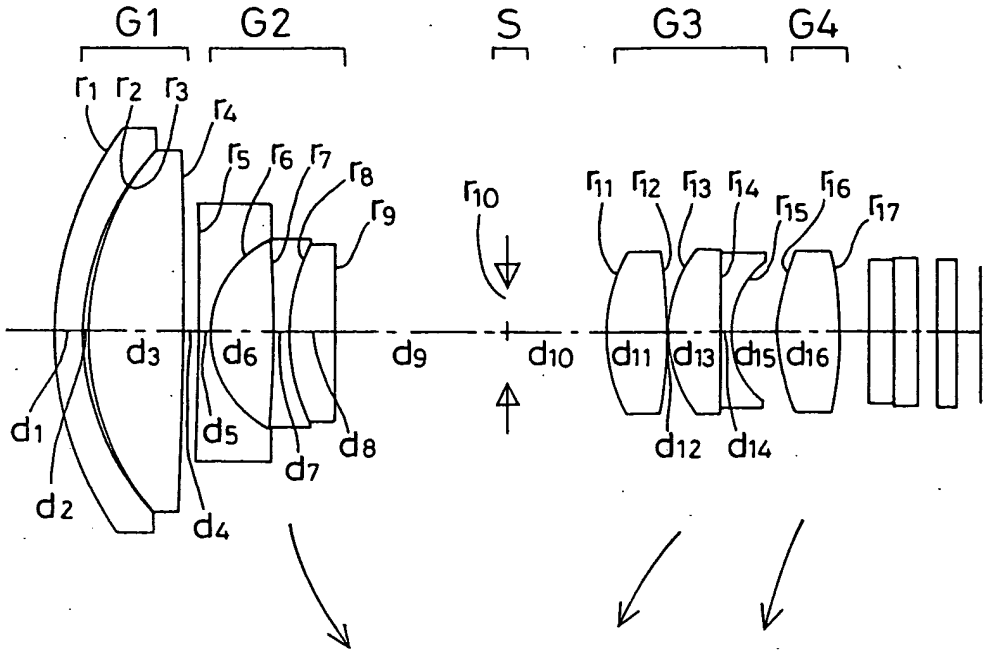

G1
G2
S
G3
G4
r1 r2 r3 r4 r5 r6 r7 r8 r9 r10 r11 r12 r13 r14 r15 r16 r17
d1 d2 d3 d4 d5 d6 d7 d8 d9 d10 d11 d12 d13 d14 d15 d16

FIG. 22

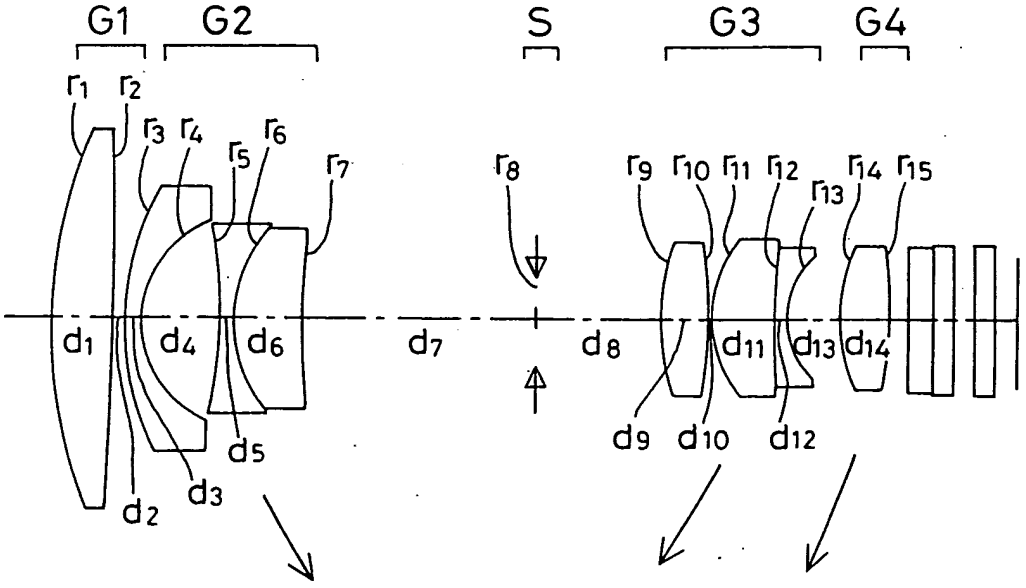

G1
G2
S
G3
G4
r1 r2 r3 r4 r5 r6 r7 r8 r9 r10 r11 r12 r13 r14 r15
d1 d2 d3 d4 d5 d6 d7 d8 d9 d10 d11 d12 d13 d14

FIG. 23

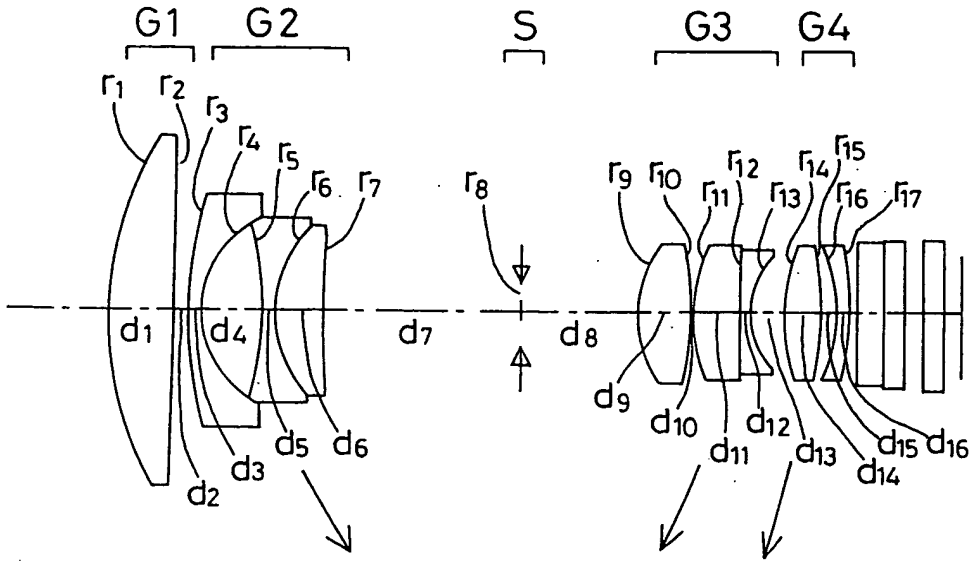

G1
G2
S
G3
G4
r1
r2
r3
r4
r5
r6
r7
r8
r9
r10
r11
r12
r13
r14
r15
r16
r17
d1
d2
d3
d4
d5
d6
d7
d8
d9
d10
d11
d12
d13
d14
d15
d16

FIG. 24

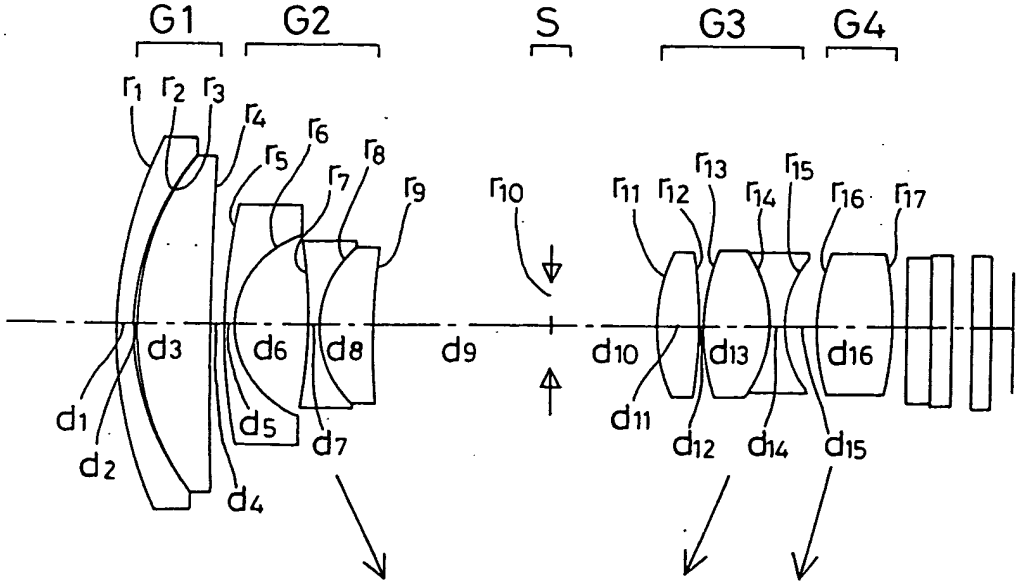

G1
G2
S
G3
G4
r1
r2
r3
r4
r5
r6
r7
r8
r9
r10
r11
r12
r13
r14
r15
r16
r17
d1
d2
d3
d4
d5
d6
d7
d8
d9
d10
d11
d12
d13
d14
d15
d16

FIG. 25

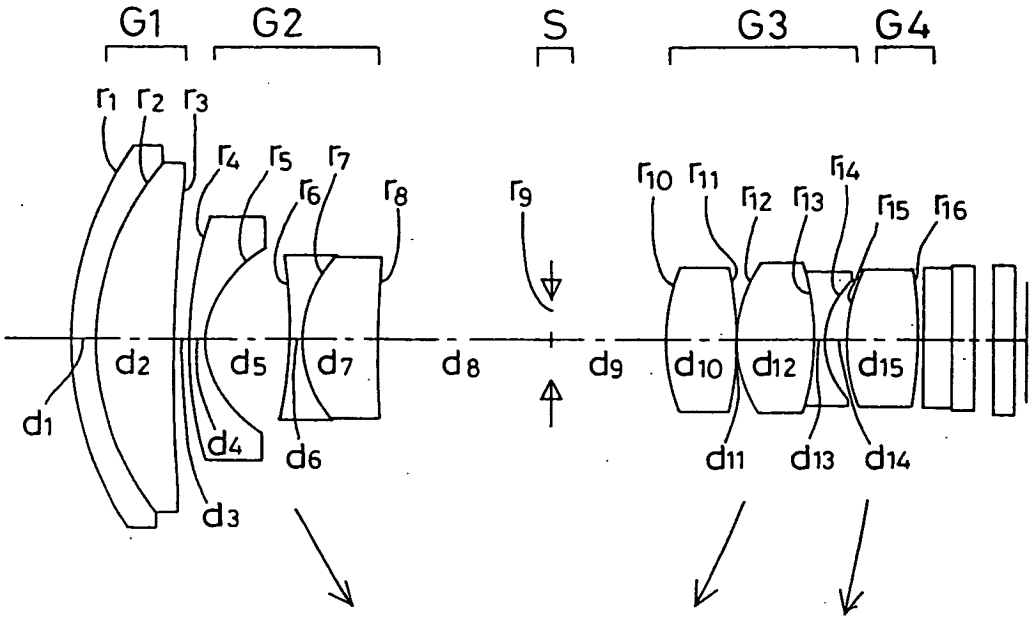

G1
G2
S
G3
G4
r1 r2 r3 r4 r5 r6 r7 r8 r9 r10 r11 r12 r13 r14 r15 r16
d1 d2 d3 d4 d5 d6 d7 d8 d9 d10 d11 d12 d13 d14 d15

FIG. 26

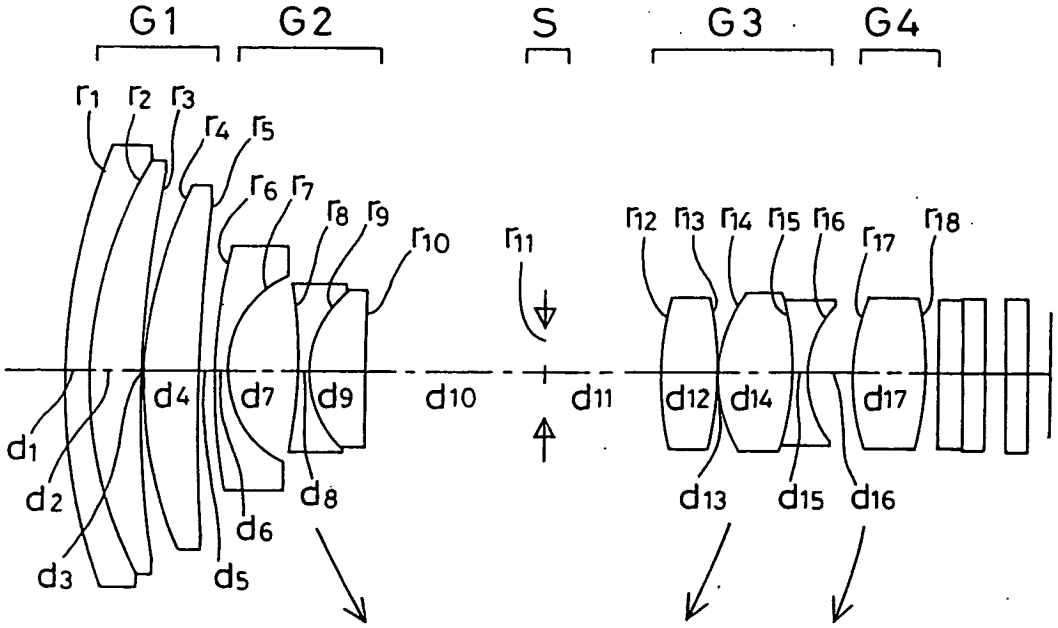

G1
G2
S
G3
G4
r1 r2 r3 r4 r5 r6 r7 r8 r9 r10 r11 r12 r13 r14 r15 r16 r17 r18
d1 d2 d3 d4 d5 d6 d7 d8 d9 d10 d11 d12 d13 d14 d15 d16 d17

FIG. 27

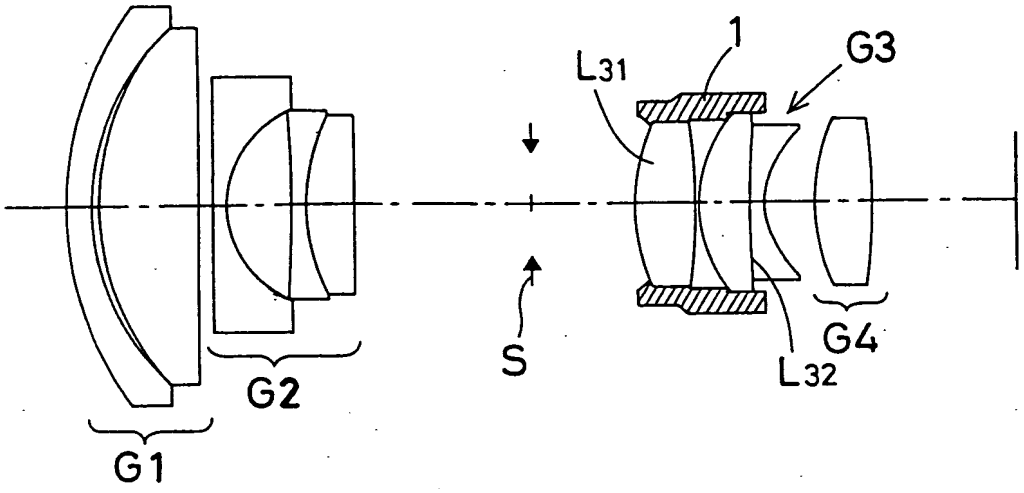


FIG. 28

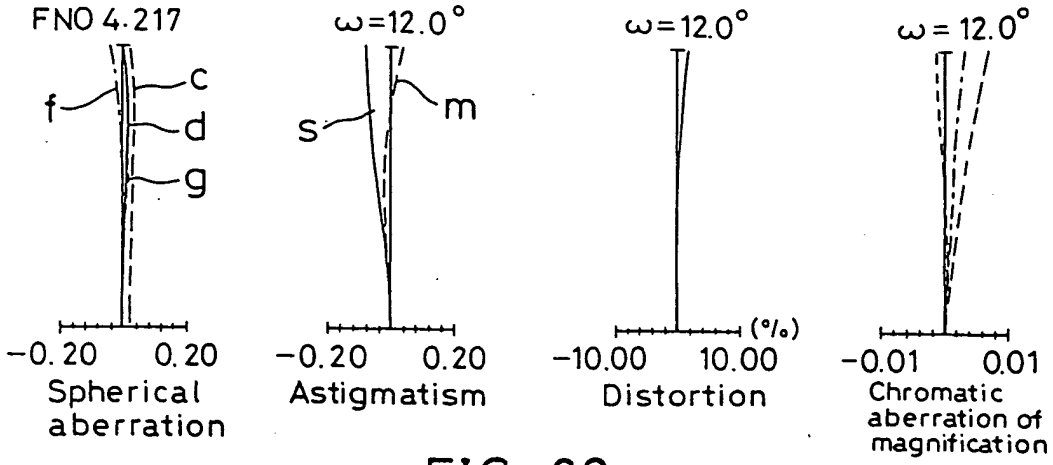



FIG. 29

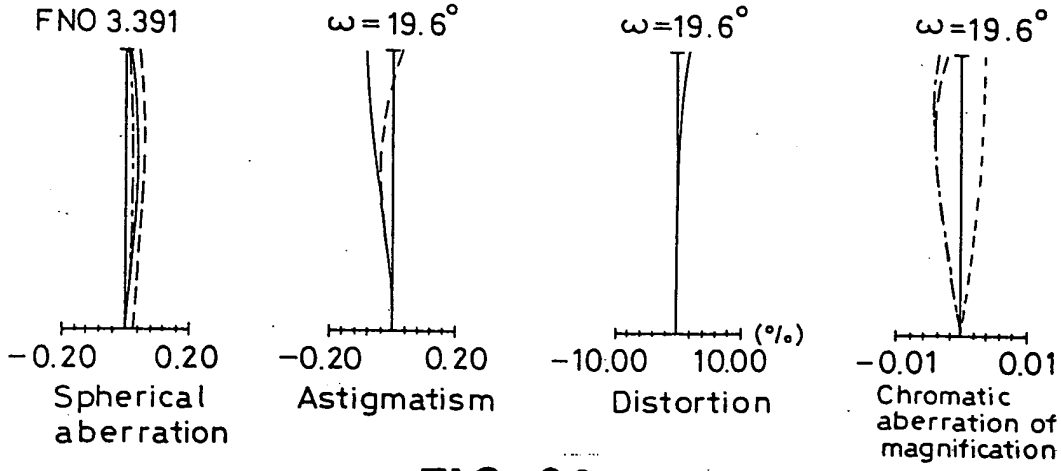



FIG. 30

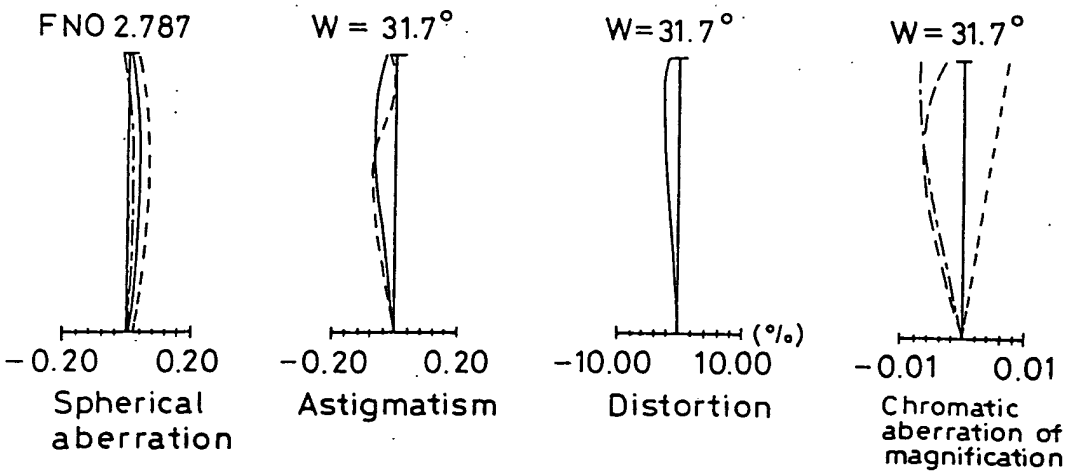


FIG. 31

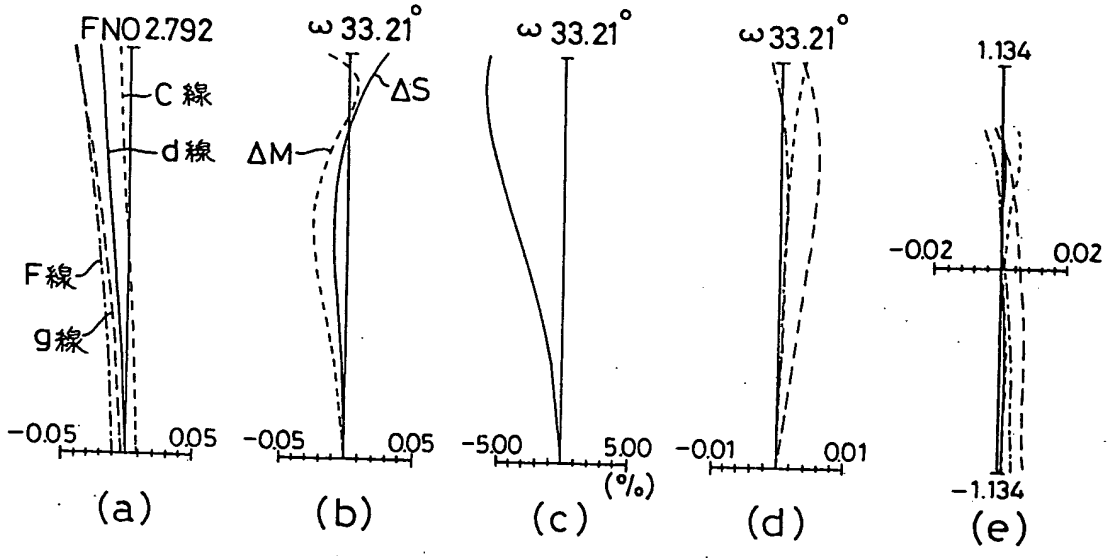

FNO 2.792
C 線
d 線
F線
g線
-0.05
0.05
(a)
ω 33.21°
ΔS
ΔM
-0.05
0.05
(b)
ω 33.21°
-5.00
5.00
(%)
(c)
ω 33.21°
-0.01
0.01
(d)
1.134
-0.02
0.02
-1.134
(e)

FIG. 32

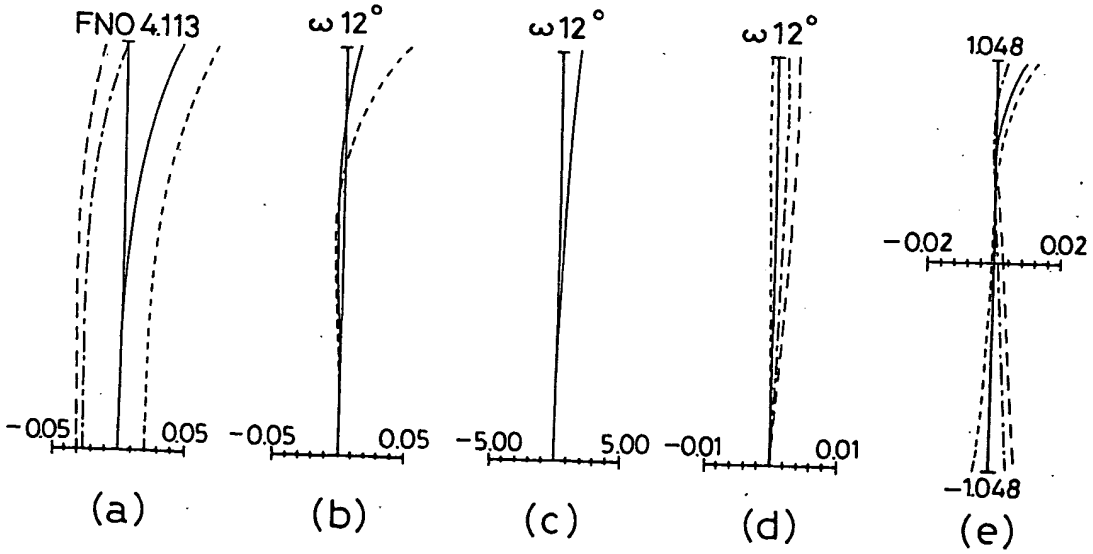

FNO 4.113
-0.05
0.05
(a)
ω 12°
-0.05
0.05
(b)
ω 12°
-5.00
5.00
(c)
ω 12°
-0.01
0.01
(d)
1.048
-0.02
0.02
-1.048
(e)

FIG. 33

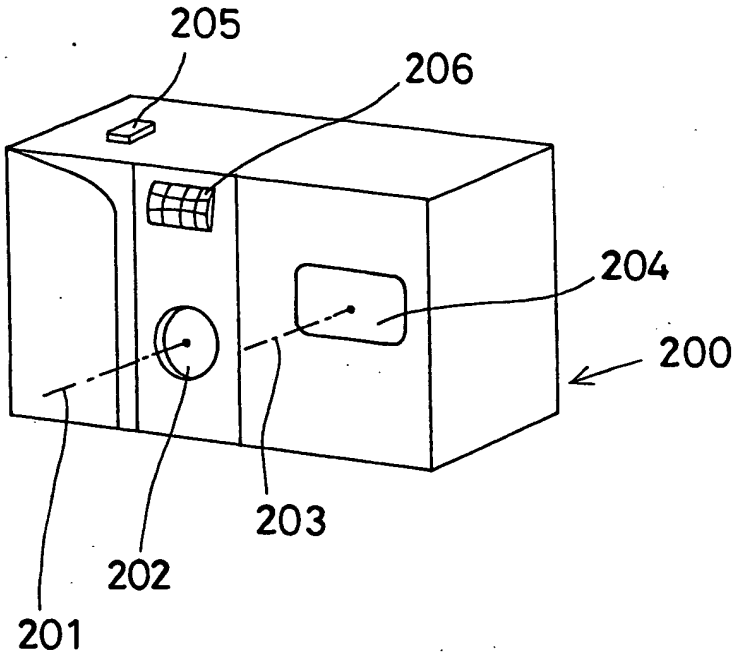



FIG. 34

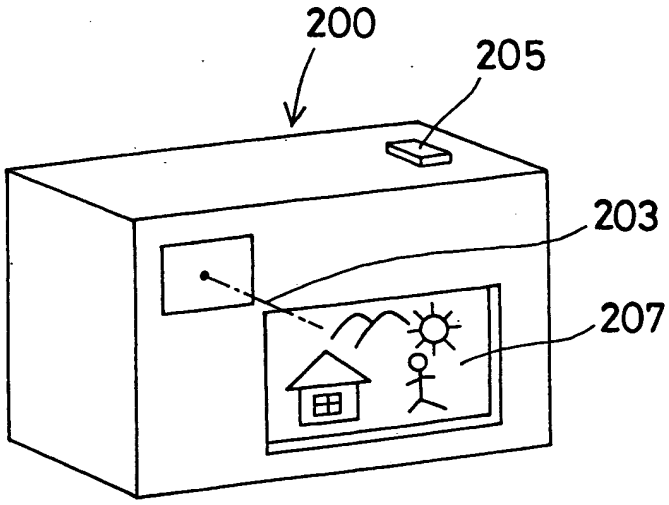


FIG. 35

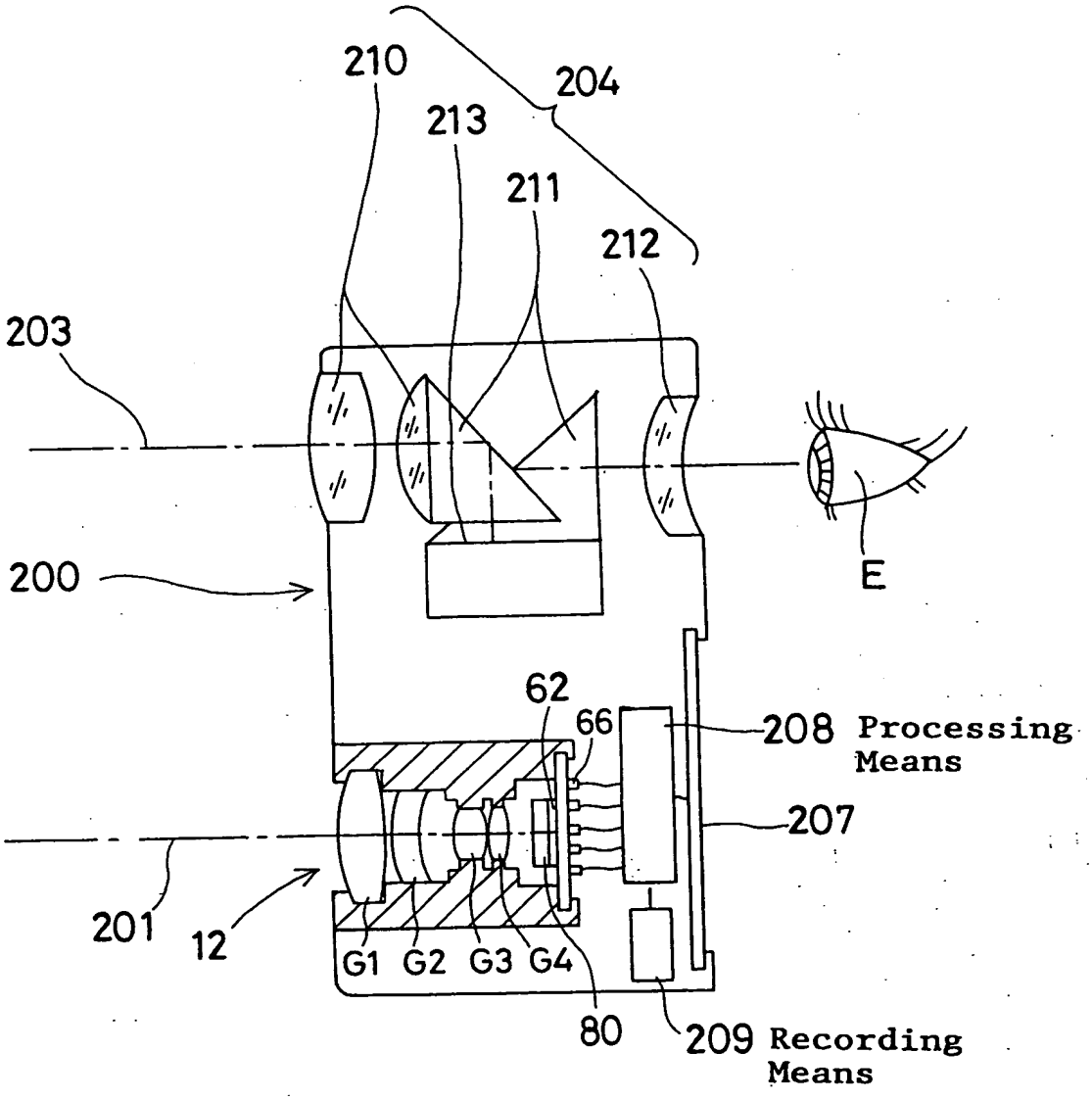

210
204
213
211
212
203
200
E
62
66
208 Processing Means
207
201
12
G1 G2 G3 G4
80
209 Recording Means

FIG. 36

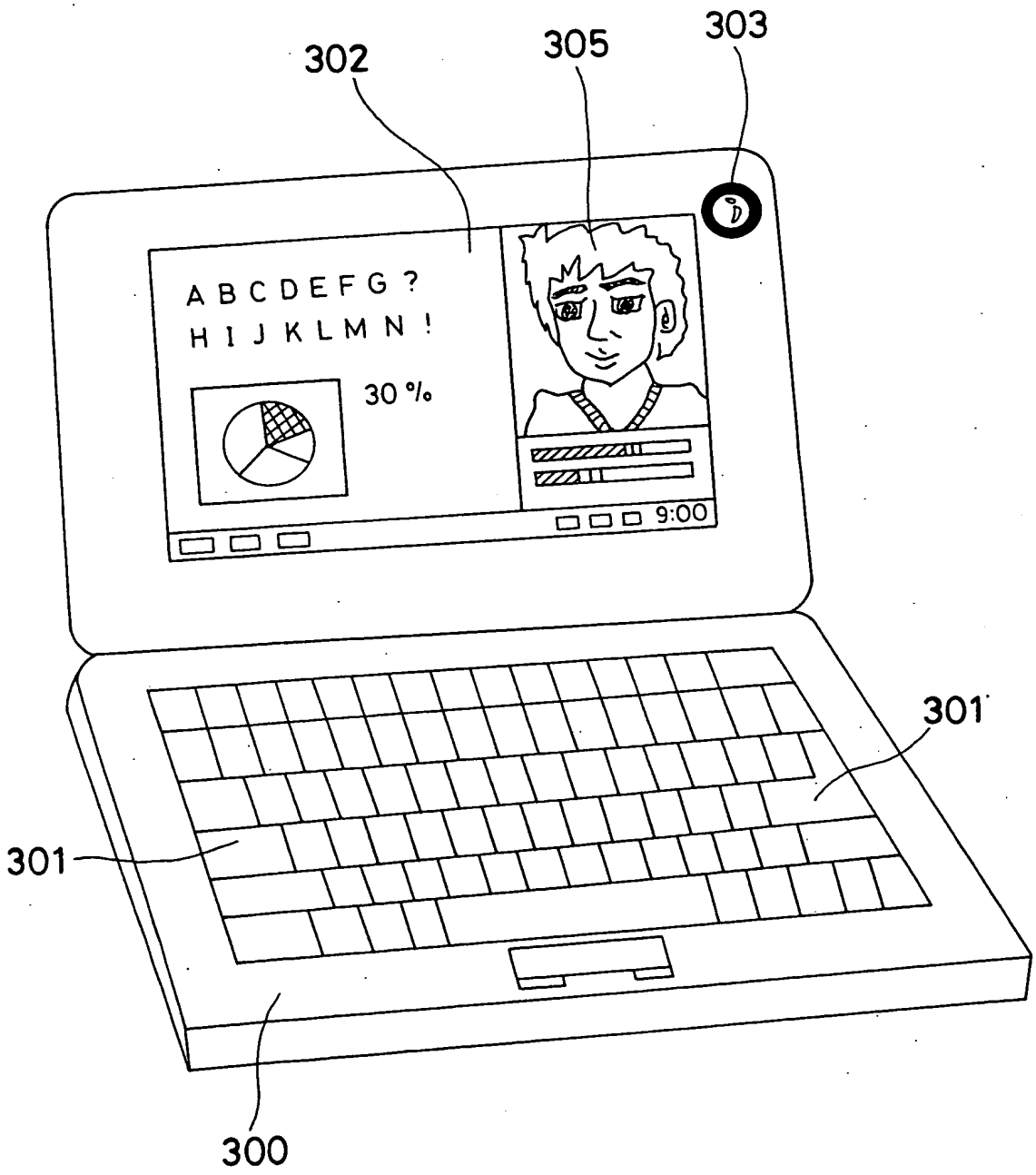


FIG. 37

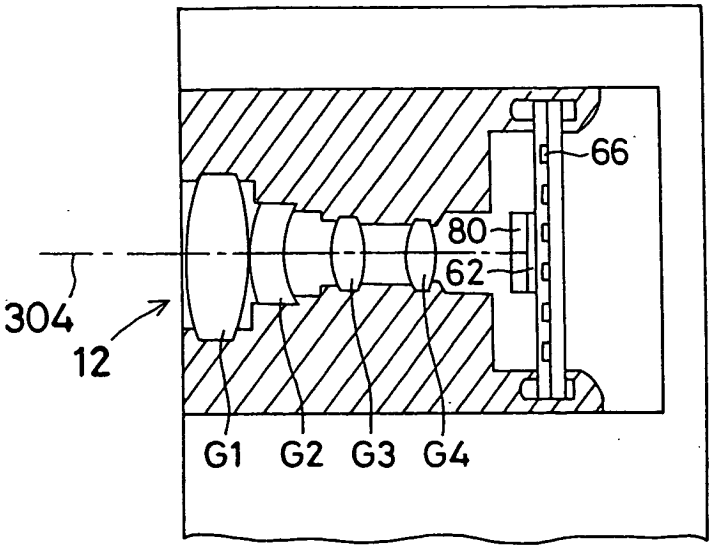



FIG. 38

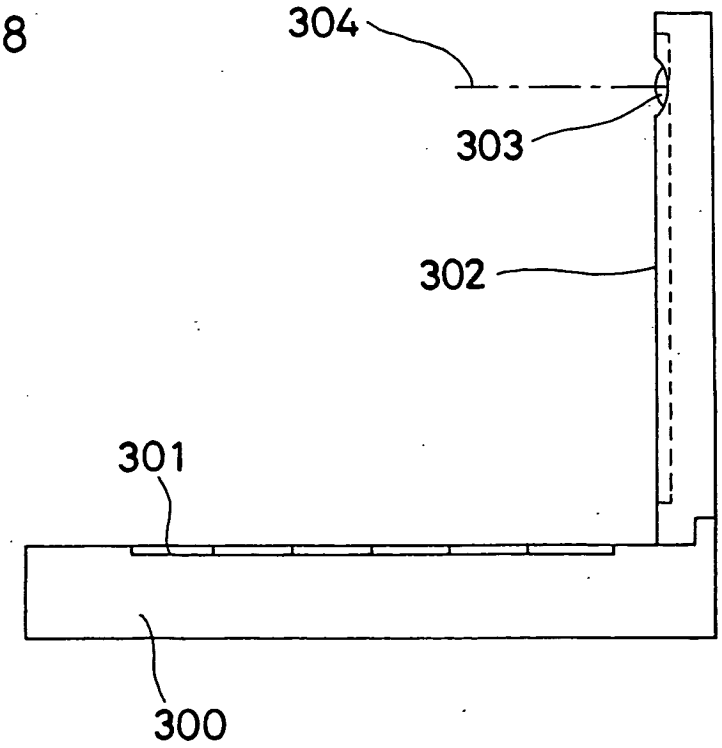
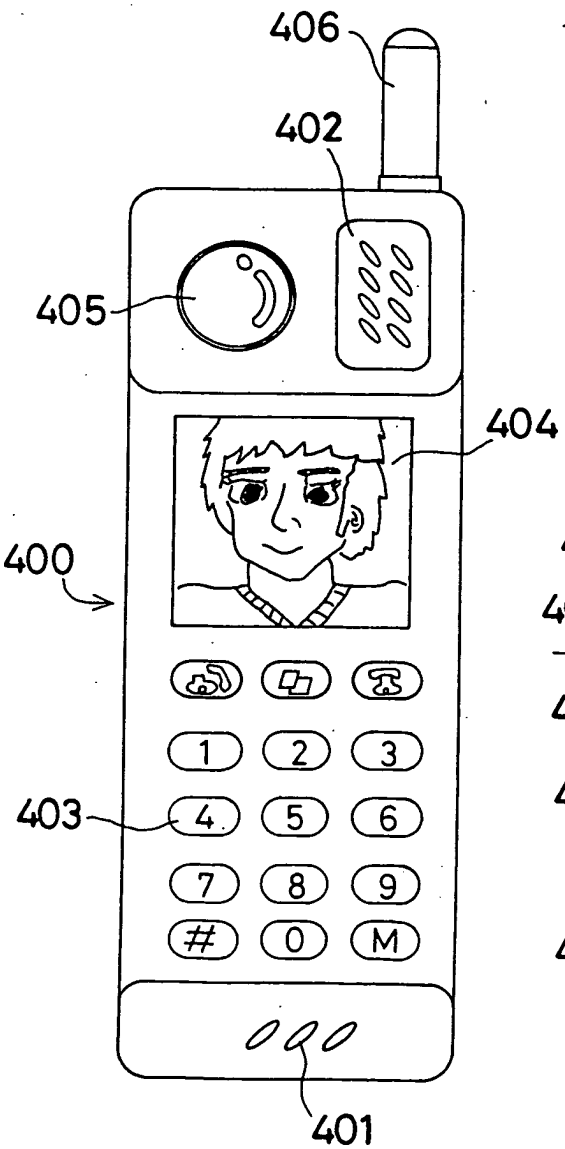


FIG. 39 (a)



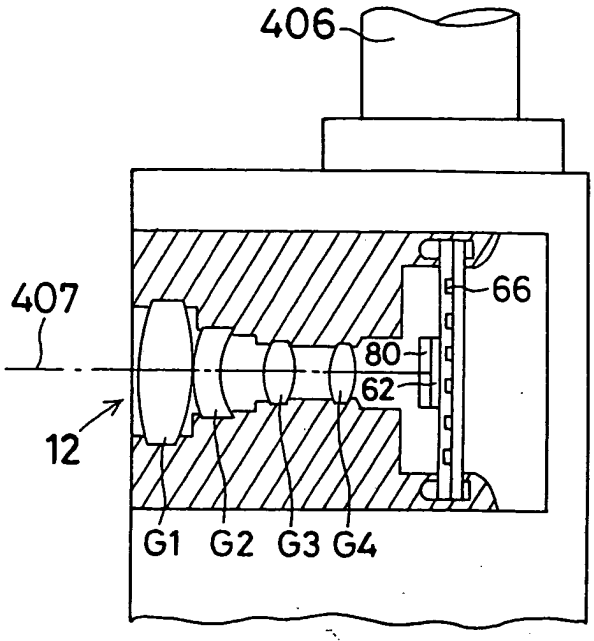




FIG. 39 (c)

FIG. 39 (b)

